Extra Practice
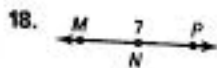
Name each angle in four ways. Then classify the angle as *acute*, *right*,
obtuse, or *straight*.

18. M 7 P
        N

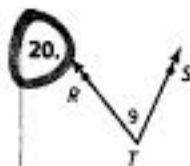∠MNP, ∠PNM, ∠N, ∠7;
straight

19. K
      H 8 I

∠HKI, ∠IKH, ∠K, ∠8;
obtuse

20. R S
         9
         T
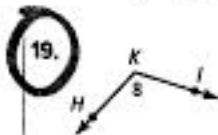
∠RTS, ∠STR, ∠T, ∠9;
acute

21. The corner where the states of Utah, Arizona, New Mexico, and Colorado
meet is called the Four Corners.

   a. Identify a pair of vertical angles. Justify your response.
   Sample answer: ∠1 and ∠3; Since ∠1 and ∠3 are opposite angles
   formed by the intersection of two lines, they are vertical angles.

   b. Identify a pair of adjacent angles. Justify your response.
   Sample answer: ∠1 and ∠2; Since ∠1 and ∠2 share a common
   vertex, a common side, and do not overlap, they are adjacent angles.

22. What is the value
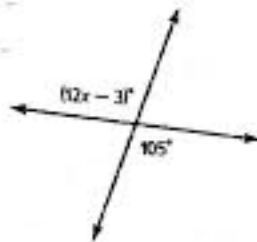of x in the figure
at the right?

26

23. What is the value
of x in the figure
at the right?

9

$(12x - 3)°$

105°

24. Identify Structure The John Hancock Center in Chicago
is shown at the right. Classify each pair of angles.

   a. ∠1 and ∠2 adjacent   **b.** ∠2 and ∠4 vertical

   c. ∠3 and ∠4 adjacent   **d.** ∠1 and ∠3 vertical

   e. If the measure of ∠2 is 66°, what are the measures of
   the other angles? ∠1 measures 114°, ∠4 measures 66°,
   ∠3 measures 114°